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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,860	09/12/2003	Brian D. Honkala	MOT-CS22682RL	8768
35813	7590	01/26/2006	EXAMINER	
DESIGN IP-DEPT. MOT 5000 W. TILGHMAN STREET SUITE 153 ALLENTOWN, PA 18104			SHERMAN, STEPHEN G	
			ART UNIT	PAPER NUMBER
			2674	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/661,860

Applicant(s)

HONKALA ET AL.

Examiner

Stephen G. Sherman

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because:

(i) Figure 2, item 21 points to the side of the mobile device but is referenced in the corresponding drawings and specification as a "dome switch;" and

(ii) in Figure 6 the communication device is labeled as item 10 but is referenced in the specification as item 110.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-13, 15, 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spence et al. (US 6,488,425) in view of Miyashita (US 6,909,906) and further in view of Helin et al. (US 6,055,439).

Regarding claim 1, Spence et al. disclose a keypad module for a portable communication device including a plurality of keys (Figure 2, items 18) and housing having a left side, a right side, a front side (Figure 2, item 12), the keypad comprising:
a keypad inlay having a left side and a right side (Figure 2, item 22);
means for securing the keypad inlay to the front side of the housing (Column 4, lines 56-67. The examiner interprets that since the bezel 22 can be attached to the housing in any manner that this would include means for securing the keypad inlay.);
and

means for releasing the keypad inlay from the housing (Column 4, lines 56-67. The examiner interprets that since the bezel 22 is removable to allow for cleaning that the housing would contain a means for releasing the bezel.).

Spence et al. fail to teach of a keypad comprising means for releasing the keypad inlay that enables the keypad inlay to be removed from the housing by depressing a key, although Spence et al. do teach that the bezel could be attached in any manner such that it could be removed manually and without tools.

Miyashita discloses of a keypad comprising means for releasing the keypad inlay that enables the keypad inlay to be removed from the housing by depressing a key (Figures 1 and 2 and column 7, lines 18-26. The examiner interprets that when the locking mechanism 111 is depressed that the operation unit 105 can be removed from the main telephone body 102.).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to use the releasing mechanism taught by Miyashita with

the keypad module taught by Spence et al. in order to allow for the detachability of the keypad inlay from the housing to allow the device to be cleaned which it is exposed to dust, dirt, or other adverse environmental conditions.

Spence et al. and Miyashita fail to teach a keypad comprising means for releasing the keypad inlay that enables the keypad inlay to be removed from the housing by simultaneously depressing at least two of the plurality of keys.

Helin et al. disclose a mobile telephone interface that includes a keypad wherein the keys located on the keypad can provide multiple functions (Column 4, lines 46-64).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to use the teachings of Helin et al. that the keys on the keypad can be used for different functions available on the device with the keypad module taught by the combination of Spence et al. and Miyashita such that the release mechanism would be controlled by operations of depressing keys on the keypad in order to provide a versatile user interface where the functions are preserved, such as removing the keypad inlay, while simplifying the telephone by reducing the number of keys/buttons.

Regarding claim 2, Spence et al., Miyashita and Helin et al. disclose the keypad module of claim 1, wherein each of the at least two of the plurality of keys actuates an electronic switch when depressed (The examiner interprets that from the combination of using the keys to release the keypad inlay, that since the keys use electronic signals,

that using the keys would cause a switch to be activated electronically in order to release the inlay.).

Regarding claim 3, Spence et al., Miyashita and Helin et al. disclose the keypad module of claim 1.

Miyashita also discloses wherein the means for securing the keypad inlay to front side of the housing comprises a first latch that engages a first catch (Figure 2 and column 7, lines 18-26. The examiner interprets that item 111 is a latch which engages a catch, item 126.).

Regarding claim 4, Spence et al., Miyashita and Helin et al. disclose the keypad module of claim 3.

Miyashita also discloses wherein the means for releasing the keypad inlay from the housing comprises disengaging the first latch from the first catch by depressing a first key of the plurality of keys (Figure 2 and column 7, lines 18-26. The examiner interprets that pressing item 111, releases the latch from the catch.).

Regarding claim 5, Spence et al., Miyashita and Helin et al. disclose the keypad module of claim 4.

Spence et al., Miyashita and Helin et al. fail to teach wherein the means for securing the keypad inlay to front side of the housing comprises a second latch that engages a second catch.

However, it would have been obvious to “one of ordinary skill” in the art at the time the invention was made to include multiple catches and latches to engage each other in order to provide a more secure attachment of the keypad inlay to the housing.

Regarding claim 6, this claim is rejected under the same rationale as claim 4.

Regarding claim 7, Spence et al., Miyashita and Helin et al. disclose the keypad module of claim 6.

Helin et al. also disclose wherein a first key comprises a send key and a second key comprises an end key (Column 4, lines 28-64.).

Regarding claim 8, Spence et al., Miyashita and Helin et al. disclose the keypad module of claim 6.

Miyashita also discloses wherein the latch is located on the keypad inlay and the catch is located on the housing (Figure 2 and column 7, lines 18-26. The examiner interprets that item 126, the catch, is located on the housing and item 111, the latch, is located on the inlay.).

Regarding claim 9, Spence et al., Miyashita and Helin et al. disclose the keypad module of claim 1.

Miyashita also discloses wherein a key comprises a button located on an end of the keypad inlay and the means for releasing the keypad inlay from the housing (Figure 2, item 111 and column 7, lines 18-26).

Spence et al., Miyashita and Helin et al. fail to teach of a keypad module wherein there are a plurality of keys located on the keypad inlay for releasing the keypad inlay from the housing and the means for releasing the keypad inlay from the housing comprises simultaneously depressing the left and right buttons.

However, it would have been obvious to “one of ordinary skill” in the art at the time the invention was made to include multiple buttons for releasing the keypad inlay from the housing, where if there were multiple buttons as the one disclosed by Miyashita on the inlay that they would all need to be depressed at the same time to release the inlay from the housing, in order to provide a more secure attachment of the keypad inlay to the housing.

Spence et al., Miyashita and Helin et al. also fail to teach wherein the plurality of keys are located on the left and right side of the keypad inlay.

However, it would have been obvious to “one of ordinary skill” in the art at the time the invention was made to locate the buttons on the left and right side of the device instead of the bottom since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse* 86 USPQ 70.

Regarding claim 10, Spence et al., Miyashita and Helin et al. disclose the keypad module of claim 9.

Miyashita also discloses wherein the means for releasing the keypad inlay from the housing comprises depressing the button using an off-center keystroke on the button (Figure 2, item 111. The examiner interprets that hitting the release button anywhere, including off-center, will result in the releasing of the keypad.).

Regarding claim 11, Spence et al., Miyashita and Helin et al. disclose the keypad module of claim 9.

Miyashita also discloses wherein the means for securing the keypad inlay to the housing comprises an arm that engages a catch (Figure 2 and column 7, lines 18-26. The examiner interprets that item 111 is an arm which engages a catch, item 126.).

Regarding claim 12, this claim is rejected under the same rationale as claim 4.

Regarding claim 13, this claim is rejected under the same rationale as claim 10.

Regarding claim 15, Spence et al., Miyashita and Helin et al. disclose the keypad module of claim 1.

Miyashita also discloses wherein the key is located on the keypad inlay (Figure 2, item 111 is located on item 105.).

Regarding claim 17, please refer to the rejection of claims 1 and 3-6, and where if the multiple keys were configured as the one disclosed by Miyashita on the inlay, they would all need to be depressed at the same time to release the inlay from the housing.

Regarding claim 18, this claim is rejected under the same rationale as claim 2.

Regarding claim 19, this claim is rejected under the same rationale as claim 9.

Regarding claim 20, this claim is rejected under the same rationale as claim 13.

Regarding claim 21, this claim is rejected under the same rationale as claim 17.

Regarding claim 22, this claim is rejected under the same rationale as claim 1.

Regarding claim 23, this claim is rejected under the same rationale as claim 7.

Regarding claim 24, this claim is rejected under the same rationale as claim 17.

Regarding claim 25, this claim is rejected under the same rationale as claim 10.

5. Claims 14, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spence et al. (US 6,488,425) in view of Miyashita (US 6,909,906) and further in view of Helin et al. (US 6,055,439) and Mark et al. (US 2002/0082042).

Regarding claim 14, Spence et al., Miyashita and Helin et al. disclose the keypad module of claim 1.

Spence et al., Miyashita and Helin et al. fail to teach of a keypad module wherein the means for securing the keypad inlay to the front side of the housing are not visible when the keypad inlay is attached to the housing.

Mark et al. disclose a keypad module wherein the means for securing the keypad inlay to the front side of the housing are not visible when the keypad inlay is attached to the housing (Figure 2, items 24 and paragraph [0020]. The examiner interprets that the engagement mechanism 24 is not visible when the surface 10 is connected to surface 20.).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to use the engagement mechanism taught by Mark et al. with the keypad module taught by the combination of Spence et al., Miyashita and Helin et al. in order to provide an improved keypad arrangement for a mobile station.

Regarding claim 16, Spence et al., Miyashita and Helin et al. disclose the keypad module of claim 1.

Spence et al., Miyashita and Helin et al. fail to teach wherein the at least two of the plurality of keys are built into the housing.

Mark et al. disclose wherein the at least two of the plurality of keys are built into the housing (Paragraph [0020]. The examiner interprets that since it is stated that the arrangement could be reversed between the removable member and the housing, that when combined with the keypad module taught by Spence et al., Miyashita and Helin et al. that the keys could be built into the housing.).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to build the keys, as taught by Mark et al., into the housing of the keypad module taught by the combination of Spence et al., Miyashita and Helin et al. in order to provide an improved keypad arrangement for a mobile station.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chadha (US 2004/0259587) discloses a modular wireless telephone with a removable keypad.

Nixon (US 6,111,760) discloses a wireless device with cover overlaid and attached using a snap fit.

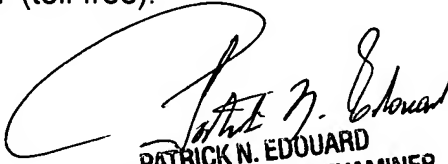
Ishibashi et al. (US 2004/0043799) disclose a cellular phone with a removable keypad.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SS



PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER

18 January 2006